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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/805,341

03/22/2004

Hiroaki Tsutsui

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03/02/2007

OLIFF & BERRIDGE, PLC

P.O. BOX 19928

ALEXANDRIA, VA 22320

EXAMINER

KUGEL, TIMOTHY J

ART UNIT

PAPER NUMBER

1712

MAIL DATE

DELIVERY MODE

03/02/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief	Application No. 10/805,341	Applicant(s) TSUTSUI ET AL.	
	Examiner Timothy J. Kugel	Art Unit 1712	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 08 February 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See attached detailed action. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: 10.
Claim(s) rejected: 1, 2, 4-9 and 11-16.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See attached detailed action.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____.
13. ☐ Other: _____.

DETAILED ACTION

1. Claims 1, 2 and 4-16 are pending as amended on 22 September 2006.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Response to Amendment

3. The proposed amendment to the claims filed on 8 February 2007, after a final rejection, but prior to the date of filing a brief, will not be entered because the added limitation to independent claim 1 raises new issues that would require further consideration and/or search.

4. Applicant's filing, on 8 February 2007, of a certified translation of the foreign priority document Japanese Patent Application 2003-80388 disqualifies the reference US Patent Application Publication 2004/0121017 (Ishii hereinafter) as prior art.

The rejection of claims 1, 2 and 4-16 under 35 U.S.C. 103(a) as being unpatentable over Ishii in view of US Patent 4,891,119 (Ogawa hereinafter) has been withdrawn.

Claim Rejections - 35 USC § 103

5. Claims 1, 2-9 and 11-16 stand rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,287,485 (Akashi hereinafter) in view of Ogawa.

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Akashi teaches an optical device comprised of a cell prepared from a pair of substrates sealed with a spacer (Column 3 Line 64 – Column 4 Line 14) containing particles (Column 8 Lines 7-22) of a polymer gel capable of reversible swelling-contracting by absorbing-desorbing a liquid when a stimulus—such as the application of heat at between 20°C and 50°C (Examples 3-6 Column 15 Line 39 – Column 19 Line 7)—is given (Column 3 Line 64 – Column 4 Line 14 and Column 4 Lines 56-66) comprising a crosslinked and/or interpenetrating network of polymers of (meth)acrylamide and meth(acrylic acid) (Column 5 Line 52 – Column 7 Line 28), a swelling liquid (Column 10 Lines 52-67 and Column 15 Lines 13-20) and a light-modulating material (Column 8 Lines 7-22).

Akashi does not disclose expressly the other polymer being soluble in the liquid.

Ogawa discloses a polyacrylamide gel comprising acrylamide, N-methylacrylamide, and N,N-dimethylacrylamide independently and in combination (Abstract, Column 1 Lines 7-11 and Column 2 Lines 63-68), crosslinked with N,N'-methylenebisacrylamide as exemplified by applicant (Column 3 Lines 4-25), in an aqueous medium wherein the water-soluble polymer is dispersed within the three dimensional crosslinked polymer structure (Column 4 Lines 48-60).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use the water-soluble polymer of Ogawa in the optical device of Akashi. The motivation to do so would have been impart elasticity to the medium even when dried to the point wherein the medium becomes hardly breakable (Ogawa Column 4 Lines 3-11).

6. Claims 1, 2, 4-9 and 14 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Franck Ilmain et al.; Volume Transition in a Gel Driven by Hydrogen Bonding; *Nature*; Jan 31, 1991; 349; 6308 (Ilmain hereinafter) in view of Ogawa.

Ilmain teaches a polymer gel composition comprising a liquid—water—and particles of a polymer gel comprised of crosslinked partially ionized poly(acrylic acid) interpolymerized within a crosslinked poly(acrylamide) gel wherein the composition shows a reversible phase transition between 10°C and 50°C (Page 1 ¶¶1-4, Fig. 1).

Ilmain does not disclose expressly the other polymer being soluble in the liquid.

Ogawa discloses a polyacrylamide gel comprising acrylamide, N-methylacrylamide, and N,N-dimethylacrylamide independently and in combination (Abstract, Column 1 Lines 7-11 and Column 2 Lines 63-68), crosslinked with N,N'-methylenebisacrylamide as exemplified by applicant (Column 3 Lines 4-25), in an aqueous medium wherein the water-soluble polymer is dispersed within the three dimensional crosslinked polymer structure (Column 4 Lines 48-60).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use the water-soluble polymer of Ogawa in the composition of Ilmain. The motivation to do so would have been impart elasticity to the medium even when dried to the point wherein the medium becomes hardly breakable (Ogawa Column 4 Lines 3-11).

Response to Arguments

7. Applicant's arguments filed 8 February 2007 have been fully considered but they are not persuasive.

Applicant argues that since Akashi and Ilmain each teach gels surrounded by liquid and are therefore not subject to drying, there is no motivation to include the water-soluble polymer of Ogawa to the compositions taught by Akashi and Ilmain; however, Ogawa teaches that the water soluble polymer impart elasticity to the medium ***even*** when dried (emphasis added) which one of ordinary skill in the art would have understood that elasticity was also imparted to the liquid-surrounded gel.

Allowable Subject Matter

8. Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Akashi combined with Ogawa and Ilmain combined with Ogawa teach similar compositions to that claimed but fail to teach or fairly suggest a composition further comprising an additional polymer having a continuous crosslinked structure.

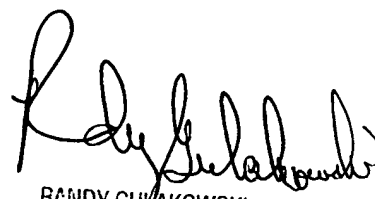
Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Kugel whose telephone number is (571) 272-1460. The examiner can normally be reached 6:00 AM – 4:30 PM Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TJK
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